

# Comparisons of Job Characteristics

**Focus Occupation:** [Water and Wastewater Treatment Plant and System Operators \(51-8031\)](#)

**Associated Occupation:** [Chemical Plant and System Operators \(51-8091\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 73

**Focus Occupation:** Water and Wastewater Treatment Plant and System Operators (51-8031)

**Associated Occupation:** Chemical Plant and System Operators (51-8091)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Production and Processing	6.0	17.6	10.8	<< Extensive education and/or training may be required
Mechanical	6.8	15.1	14.8	0 Current knowledge level may be sufficient
Chemistry	4.8	12.2	12.6	0 Current knowledge level may be sufficient
Computers and Electronics	8.4	11.6	10.2	< Expanded education and/or training may be required
Public Safety and Security	6.9	10.5	12.7	> Current knowledge level is likely sufficient
Physics	4.3	7.2	13.2	>> Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 87

**Focus Occupation:** Water and Wastewater Treatment Plant and System Operators (51-8031)

**Associated Occupation:** Chemical Plant and System Operators (51-8091)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Operation Monitoring	6.6	15.9	11.9	<< Extensive development of skills in this area may be required
Operation and Control	5.4	13.6	11.4	< A higher skill level may be required
Monitoring	9.9	12.9	11.2	< A higher skill level may be required
Quality Control Analysis	5.9	11.5	10.3	< A higher skill level may be required
Repairing	3.4	7.5	9.0	> Skill level is likely sufficient
Equipment Maintenance	3.5	7.1	9.3	>> Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 87			
Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031) Associated Occupation: Chemical Plant and System Operators (51-8091)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Selective Attention	8.7	12.8	8.7	<<	Extensive improvement in abilities may be required
Far Vision	7.8	11.6	8.2	<<	Extensive improvement in abilities may be required
Perceptual Speed	7.4	11.4	9.8	<	Some improvement in abilities may be required
Auditory Attention	5.9	11.1	6.6	<<	Extensive improvement in abilities may be required
Hearing Sensitivity	5.6	10.1	6.7	<<	Extensive improvement in abilities may be required
Response Orientation	4.0	8.8	6.9	<	Some improvement in abilities may be required
Speed of Closure	5.9	8.7	5.3	<<	Extensive improvement in abilities may be required
Gross Body Equilibrium	3.2	6.9	7.1	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 92
<b>Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031)</b> <b>Associated Occupation: Chemical Plant and System Operators (51-8091)</b>		
Work Activities	Exclusivity of Activity	
Adjust production equipment/machinery setup	25	
Clean equipment or machinery	20	
Collect samples for testing	58	
Direct and coordinate activities of workers or staff	3	
Inspect machinery or equipment to determine adjustments or repairs needed	42	
Maintain consistent production quality	50	
Maintain or repair industrial or related equipment/machinery	39	
Maintain production or work records	19	
Monitor production machinery/equipment operation to detect problems	27	
Operate chemical processing equipment	77	
Operate power driven pumps	66	
Test materials or solutions	73	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 69

**Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031)**

**Associated Occupation: Chemical Plant and System Operators (51-8091)**

Tools and Technologies	Exclusivity
Air circulation and parts and accessories	40
Computers	1
Conveyors and accessories	18
Gas analyzers and monitors	10
Indicating and recording instruments	2
Industry specific software	1
Laboratory decanting and distilling and evaporating and extracting equipment and supplies	19
Pumps	9
Separators	62
Water treatment and supply equipment	21

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.